

OH.51-1

*Booy, Allen*  
Department of Energy

United States Government

# memorandum

OH.51

11179

DATE: AUG 2 1994  
REPLY TO: EM-421 (W. A. Williams, 427-1719)  
ATTN OF:  
SUBJECT: Elimination of the Robbins & Myers Site, Springfield, Ohio

TO: The File

I have reviewed the attached elimination recommendation and the original historical records for the Myers & Robbins facility in Springfield, Ohio. I have determined that there is little likelihood of radioactive contamination at these sites. The only record of activity at this site by Department of Energy predecessors is an equipment test of a pump in March 1975. This test involved limited amounts of radioactive materials and there was a serious effort to decontaminate the equipment at the conclusion of the tests.

Based on the above, the Myers & Robbins site in Springfield, Ohio, is hereby eliminated from further consideration under the Formerly Utilized Sites Remedial Action Program.

*W. Alexander Williams*

W. Alexander Williams, PhD  
Designation and Certification Manager  
Off-Site/Savannah River Program Division  
Office of Eastern Area Programs  
Office of Environmental Restoration

Attachment

bcc:  
Booz, Allen and Hamilton, Inc.

Distribution:

EM-40 (2)

EM-42 (3)

Williams Reader

EM-421:williams:djn:427-1721:8/1/94:elim10.waw

EM-421  
Williams  
8/1/94

EM-421  
Wagoner  
8/1/94

# BOOZ ALLEN & HAMILTON INC.

4330 EAST WEST HIGHWAY • BETHESDA, MARYLAND 20814-4455 • TELEPHONE: (301) 951-2200 • FAX: (301) 951-2255

July 28, 1994  
16600-072-114-010-051

Mr. Albert Johnson  
U.S. Department of Energy (EM-421)  
Quince Orchard Building  
Gaithersburg, Maryland 20585

Subject: Contract No. DE-AC01-92EW40006  
*Historical Records from Fernald on the Robbins and  
Myers site in Springfield, Ohio*

Dear Mr. Johnson:

We have received the information from Fernald regarding the Robbins and Myers site in Springfield, Ohio. We have reviewed this information to assess the likelihood that there may be significant quantities of radioactive at this site, per your instructions. A copy of the Fernald information, our review of this information, and a disk are attached.

Based on our review of the Fernald information, we find there is little likelihood that there are quantities of radioactive materials above DOE guidelines at this site.

If you have any questions, please contact me at (301) 916-7258.

Sincerely,



John L. Russell  
BA&H Team Leader

cc: A. Engebretson  
C. Aldrich  
FUSRAP files

Fernald Environmental



Restoration Management Corporation

P.O. Box 398704 Cincinnati, Ohio 45239-8704 (513) 738-6200

July 27, 1994

U. S. Department of Energy  
Fernald Environmental Management Project  
Letter No. C:CRU4(OR):94-0313

W. Alexander Williams, Ph.D  
Manager Certification and Verification  
FUSRAP  
U.S. Department of Energy  
Quince Orchard Building  
Gaithersburg, MD 20885

Dear Mr. Williams:

**INFORMATION REGARDING ROBBINS & MYERS CO.**

The requested information regarding Robbins & Myers is enclosed. This issue has been discussed with DOE-FN and direction was given to forward the information to you.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Nixon", written over a horizontal line.

Dennis Nixon  
Assistant CRU4 Director

RAV:slk  
Enclosure

c: J. R. Craig, DOE-FN  
W. S. Pickles  
J. W. Reising  
W. G. Tope  
R. A. Vogel  
File Record Storage Copy 102



FERNCO  
P. O. Box 398704  
Cincinnati, OH 45239-8704

FACSIMILE LEAD SHEET

DATE: 7/28/94  
TO: Jack Russell  
COMPANY NAME: Ray Allen  
LOCATION:

No. of Pages:  
Including Lead Sheet:

FAX NO. TO BE CALLED: 301 916 7277 TELEPHONE NO.: (513) 648-6625  
FROM: R. Vogel TELEPHONE NO.: (513)  
PROJECT NAME: FERNALD ENVIRONMENTAL MGMT CONTRACT NO.: DE-AC05-92OR21972

MESSAGE

SUBJECT:

C: File Record Storage Copy 106.4.



## INTEROFFICE MEMORANDUM

To:	Dennis Nixon Assistant CRU4 Director Operation & Remediation	Date:	July 27, 1994
Location:	Springdale, MS 82-2	Reference:	
From:	Robert A. Vogel <i>RAV</i> CRU4 Operation Remediation Support Engineering	FERRICO #:	M:CRU4(OR):94-0332
Location:	Springdale, MS 82-2	Client:	DOE DE-AC05-92OR21972
Extension:	648-6625	Subject:	INFORMATION FOR DOE-HQ REGARDING ROBBINS & MYERS CO.

c: File Record Storage Copy 106.4.18.3  
Wiff Pickles  
Johnny Reising, DOE-FN  
Bill Tope

The search for information regarding Robbins & Myers Co. (Attachment 1) of Springfield, Ohio has been completed. The attached (Attachment 2) IH&R Department Monthly Report for March 1975 (page 3) explains and defines the issue. The intention is that this monthly report be provided to W. Alexander Williams DOE-Germantown.

RAV:slk  
Attachment (2)

ATTACHMENT 1

CONTRACT AT(50-1)-1156

ENCLOSURE 1

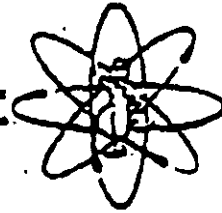
## NATIONAL LEAD COMPANY OF OHIO

A SUBSIDIARY OF N. L. INDUSTRIES, INC.

P. O. BOX 39128

CINCINNATI, OHIO 45239

PHONE: AREA CODE: 513-778-1151



OCT 12 1976

5844

Mr. H. B. Fletcher, Director  
 Uranium Enrichment Operations Division  
 Oak Ridge Operations Office  
 U. S. Energy Research & Development Adm.  
 P. O. Box 117  
 Oak Ridge, Tennessee 37830

Dear Mr. Fletcher:

## ERDA RECOVERY PROGRAM

Ref: Letter, Fletcher to Audia, 9/27/76, same subject

Per your request, we have reviewed our contract files, in addition to other sources, for the names of companies who have performed work at our request. It does not include material shipped from here on a production order from the AEC or ERDA.

Identification as to type of agreement and type of work is listed. The dates are only guidelines and may not include every time material was processed.

Very small test samples (such as contaminated MgF<sub>2</sub>) were sent out for possible sale to various companies. They are also excluded.

If you desire other information, please let us know.

Sincerely,

S. F. Audia  
 Manager

CEP/rhg

Attachment

cc: W. J. Adams                      C. E. Polson  
      H. D. Fletcher  
      W. J. Grannen                  Central Files  
      L. M. Levy  
      R. C. Heatherton

1111

✓ 2100 already determined by D-2

PROCESSORS OF RADIOACTIVE MATERIALS - WORK REQUESTED BY MLO

<u>COMPANY NAME AT TIME OF REQUEST</u>	<u>LOCATION</u>	<u>APPROX. DATE</u>	<u>CODE</u>
Ulighany-Ludlum Steel Corp. (4)	Watervliet, N. Y.	3/52	PM ✓
American Machine & Foundry (4)	Brooklyn, N. Y.	10/52, 7/53,	TM ✓
Landis Machine Tool Co. (2)	Waynesboro, Pa.	9/52	TM ✓
Lechman Steel Corp. (Lackawanna) (4)	Buffalo, N. Y.	2/52	PM ✓
Lesley - Wells (2)	St. Beloit, Wisc.	5/53	TM ✓
Lorr Corp. (Door Oliver) (2)	Westpoint, Conn.	1/55	TO ✓
Oregon Bureau of Mines (3) in the form of U.S.	Albany, Oregon	10/54 - 6/55	PM ✓
Superior Steel Co. (2)	Carnegie, Pa.	12/55-1/57	PM
Atlas Steels, Ltd., (2)	Welland, Ont.	2/57, 11/57	TM ✓
Armour Research Foundation (1)	Chicago, Ill.	9/57	TO ✓
Aircraft Laboratories (1)	Oxford, Ohio	3/57	PM ✓
Chambersburg Engr. Co. (2)	Chambersburg, Pa.	3/57	TM ✓
Knoxville Iron Co. (1), (2)	Knoxville, Ky.	10/57 - 10/58	✓
Goodwin Corp. (2)	Chicago, Ill.	2/57	TC ✓
Associated Aircraft Tool & Mfg. Co. (1)	Hamilton, Ohio	2/56 - 3/57	PM ✓
Ignus Metals (1)	Cincinnati, Ohio	12/57, 3/58	TM ✓
Imonds Saw & Steel Co. (1)	Lockport, N. Y.	7/52 - 7/57	PM ✓
Watertown Arsenal (3)	Watertown, Mass.	11/57	TM ✓
Intro Rare Metals Co. (1)	Cannonsburg, Pa.	5/54-8/56	PO
Ohio State University (1)	Columbus, Ohio	12/56, 5/59	TCC-
Jobe Reducing Corp. (2)	Wallington, N.J.	1/58	TM ✓
American Bearing Corp. (1)	Indianapolis, Ind.	7/58	TM ✓
Jax-Magne-thermic Corp. (2)	Youngstown, Ohio	10/58, 11/61	TM ✓
Westinghouse Electric (2)	Bloomfield, N. J.	5/58, 6/59	TM
Oregon Metallurgical Corp. (1)	Albany, Oregon	11/58	PM ✓



-2-

<u>COMPANY NAME AT TIME OF REQUEST</u>	<u>LOCATION</u>	<u>APPROX. DATE</u>	<u>CODE</u>
S. Steel, Nat'l Tube Div. (2)	McKeesport, Pa.	4/59, 2/60	TH ✓
utton, Steele and Steele (2)	Dallas, Texas	11/59	TH ✓
orth Carolina State College (1)	Chapel Hill, N. C.	1958 4/59	TO ✓
inter Douglas Plc. of Bridgeport Brass (2)	Riverside, Calif.	8/59	TH ✓
ridgeport Brass Co. (4)	Adrian, Mich.	2/59	PH ✓
etrolite Corp. (2)	St. Louis, Mo.	9/59	TOC ✓
ald Machine Co. (2)	Worcester, Mass.	3/60, 5/60	TH ✓
bois Chem. (2)	Cincinnati, Ohio	5/60	TH ✓
oneer Division, Bendix Aviation (2)	Davenport, Iowa	6/60; 9/60	TC ✓
frican Machine & Metals, Inc. (2)	E. Moline, Ill.	5/60	TO ✓
uffer Metals, Inc. (2)	Richmond, Calif.	4/61	TH ✓
aca Gun Co. (2)	Ithaca, N. Y.	9/60, 8/61 11/61	TH ✓
L. LeBlond Mach. Tool Co. (2)	Cincinnati, Ohio	11/61	TH ✓
frican Mfg. of Texas (2)	Ft. Worth, Tex.	7/61, 8/61, 8/62; 4/63	TH ✓
ason Works (2)	Rochester, N. Y.	10/61	TH ✓
d Machinery & Chem. Corp. (2)	Nitro, W. Va.	1962	TOC ✓
ver Corp. (2)	Battlecreek, Mich.	4/62	TO ✓
elle Memorial Inst. (4)	Columbus, Ohio	12/62	TH ✓
onal Lead Co., Nuclear Division (2)	Albany, N.Y.	7/62	TH ✓
iversity of Florida (1)	Gainesville, Fla.	10/63 - 11/69	TH ✓
incinnati Milling Machine (2)	Cincinnati, Ohio	10/63	TH ✓
England Lime Co. (2)	Canaan, Conn.	6/63	TOC ✓
. Hayes, Inc. (2)	Cranston, R. I.	1/64	TH ✓
les Taylor & Sons (2)	Cincinnati, Ohio	8/64, 1/65	TO ✓

-3-

<u>COMPANY NAME AT TIME OF REQUEST</u>	<u>LOCATION</u>	<u>APPROX. DATE</u>	<u>CODE</u>
Southern Research Institute (1)	Birmingham, Ala.	12/64, 9/65	TH ✓
University of Denver Research Institute (1)	Denver, Colo.	2/65	TH ✓
New England Materials Lab., Inc. (2) (also called Teledyne Mat. Res.)	Medford, Mass.	1/63; 4/67	TH ✓
Tocco Heat Treating Co. (2)	Cleveland, Ohio	4/67; 2/68	TH ✓
Fenwal, Inc. (2)	Ashland, Mass.	5/67; 11/67	TC ✓
Robbins & Myers Co. (2)	Springfield, Ohio	1975	THC ✓

ODE: P = PRODUCTION QUANTITIES

T = TEST QUANTITIES

C = CONTAMINATED MATERIAL (TBP,  $\text{MgF}_2$ , SLUDGE)

M = RADIOACTIVE METAL

O = OTHER THAN METAL (RADIOACTIVE) ( $\text{UF}_6$ ,  $\text{ThO}_2$ )

\* = CONTAMINATED SCRAP IRON

(1) = Sub-Contract

(2) = Purchase Order

(3) = Interagency Agreement

(4) = Prime AEC Contract

**NLO SUBCONTRACTORS/VENDORS UNDER PRIME CONTRACT NO. AT(30-1)-1156 (Cont'd)**

	<u>SUBCONTRACTOR/VENDOR</u>	<u>PERIOD OF OPERATION</u>	<u>PROCUREMENT INSTRUMENT</u>	<u>RADIOACTIVE MATERIAL INVOLVED</u>
8.	Petrolite Corporation St. Louis, MO	September 1959	Purchase Order	Test Quantities of Contaminated Material Other than Metal
9.	Robbins & Myers Company Springfield, OH	1975	Purchase Order	Test Quantities of Contaminated Material Other than Metal
10.	Charles Taylor & Sons Cincinnati, OH	August 1964 and January 1965	Purchase Order	Test Quantities of Contaminated Material Other than Metal
11.	University of Denver Research Institute Denver, CO	February 1965	Subcontract	Test Quantities of Metal
12.	University of Florida Gainesville, FL	October 1963 - November 1969	Subcontract	Test Quantities of Metal

**NOTES:** Periods of Operation are approximate.

- (1) American Machine & Foundry was also a major DuPont subcontractor that did work in support of Savannah River Plant operations.
- (2) The only documents found indicate NLO Health & Safety Division was involvement with a polonium spill at this firm.
- (3) Documents found indicate that this firm operated under AEC Special Nuclear Material license during the period January 1958 through November 1962. Uranium metal containing 20% U-235 was authorized for use in the Corporation's Albany Plant for alloying uranium and zirconium metal.

2308115

April 4, 1978

## IHLR DEPARTMENT MONTHLY REPORT FOR MARCH 1978

R. C. Heatherton

M. W. Reback

Environmental Sampling - The following shows the January and February 1978 monthly average Boundary Station contaminant concentrations.

Period	<u>Uranium</u> $\times 10^{-14}$ $\mu\text{Ci/ml}$	<u>Alpha</u> $\times 10^{-14}$ $\mu\text{Ci/ml}$	<u>Beta</u> $\times 10^{-14}$ $\mu\text{Ci/ml}$	<u>Particulates</u> $\mu\text{g/m}^3$
January	1.09	1.07	4.87	51
February	0.64	0.67	5.19	48
MPC	200	200	100,000	60

Two samples for total fluoride were obtained at Boundary Station #2 during the month. They showed fluoride concentrations of 234 and 110  $\mu\text{g/m}^3$ . There is no EPA limit for fluoride. The eight-hour TLV is 2000  $\mu\text{g/m}^3$ .

One  $\text{NO}_2$  sample was obtained during March. The concentration of  $\text{NO}_2$  was 3.8  $\mu\text{g/m}^3$ . The EPA limit for  $\text{NO}_2$  in ambient air is 100  $\mu\text{g/m}^3$ .

Inplant Sampling - Samples taken in Plant 4 on several days during the month showed the concentration of HF was frequently above the eight-hour TLV. Results have been reported to the Production Division.

Ammonia samples were taken in the Plant 4 dissociator room and the elevator. The concentration of  $\text{NH}_3$  in the room was above the TLV. The concentration in the elevator was less than the TLV but high enough to be annoying to elevator passengers.

$\text{NO}_2$  samples taken in the Refinery denitrification area showed the concentration of  $\text{NO}_2$  in the air averaged 1200  $\mu\text{g/m}^3$ . The TLV is 9000  $\mu\text{g/m}^3$ .

0440823

**INER DEPARTMENT MONTHLY REPORT FOR MARCH 1978**

Page 2

**R. C. Heatherton****April 4, 1978**

**Stack Sampling** - The stack sampling pump on the Pilot Plant oxidation furnace was inspected and found to be incapable of drawing more than 10 liters of air per minute through the filter. The stack velocity calls for 30 lpm. A larger pump was installed and it would pull only 28 lpm. The cause of this deficiency appears to be the length of the tubing between the pump and the filter head. A more powerful pump should be obtained or the pump will have to be moved closer to the filter. The Pilot Plant has been asked to have a larger pump installed.

The only stack loss during March was 3.5 U kg from Plant 4 collector G4-6.

**Respirator Program** - A lecture on Respiratory Protective Equipment was given for a group of first shift operators from the Refinery this month. Respirator fittings were performed on a total of 19 chemical operators.

**Breathing Air Quality** - Analysis of the breathing air sample obtained for March is shown below:

	<u>% O<sub>2</sub></u>	<u>% CO<sub>2</sub></u>	<u>CO (ppm)</u>
March	20.8	0.025	< 2 ppm
Limits	19.5 (min.)	0.1 (max.)	20 ppm

**Noise** - Two Bendix Noise Dosimeters were received this month. The dosimeters operate satisfactorily and tests showed reasonable agreement between "% Exposures" as measured with the dosimeter and as calculated from sound level readings obtained with the E & K Sound Level Meter. Preliminary analysis of some noise dose readings obtained in the Refinery on the denitration area pot deck shows % Exposures slightly in excess of 100%, the maximum permissible daily dose.

**Offsite Trips** - On 3/8/78, I accompanied A. F. Pennak to the ERDA Weldon Spring site to collect water samples in connection with the effort to halt the drainage from waste pits 1, 2, and 3. The samples will be analyzed by the Bioassay Laboratory. Results will help determine the best location for blockage of the drainage pipes.

2490824

**IHAH DEPARTMENT MONTHLY REPORT FOR MARCH 1975**

**Page 3**

**R. C. Heatherton**  
**April 4, 1975**

On 3/18/75, the testing of a Moyno pump at the Robbins & Myers, Incorporated, plant in Springfield, Ohio was monitored by D. A. Fuchs for adherence to Health & Safety requirements. Plant #1 filter cake was pumped during the test and afterwards was flushed from the pump. No rinse water reached the plant's sump. The pump was then dismantled and thoroughly decontaminated. Samples indicated that the equipment was cleaned and decontaminated to its original state. All filter cake, rinse water, plastic drop cloths, coveralls, gloves, rags, etc., were drummed and returned to NLO.

K. N. Ross attended a specialty conference on continuous monitoring of stationary air pollution sources at St. Louis, Missouri, on 3/20-21.

Original signed by  
M. W. BOBACK  
Chief of Ind. Hygiene & Radiation  
M. W. Boback

**MWB/KNR/DAF/td**

**cc: R. C. Heatherton - 2**

**0490825**